

Claims

[c1] What is claimed is:

1. A method for preventing galvanic corrosion associated with a fastener of a first metal type and an orifice in a second metal type and for receiving said fastener, said method comprising:

coating at least a portion of the fastener adapted to contact said second metal type with at least one corrosive inhibitor; and

coating at least one of said corrosive inhibited portion of said fastener and at least a portion of the orifice with an anaerobic composition that expands after said corrosive inhibited portion of said fastener is at least partially inserted into said orifice.

[c2] 2.The method of Claim 1, wherein said fastener is removable from said orifice responsively to at least one of a specific torque and a heat.

[c3] 3.The method of Claim 1, wherein said anaerobic composition consists essentially of aromatic dimethacrylate ester.

[c4] 4.The method of Claim 1, wherein said anaerobic com-

position consists essentially of hydroxyalkyl methacrylate.

[c5] 5.The method of Claim 1, wherein said anaerobic composition consists essentially of bisphenol A fumarate resin.

[c6] 6.The method of Claim 1, wherein said corrosive inhibitor consists essentially of molybdenum disulfide.

[c7] 7.The method of Claim 1, wherein said first metal type is one of an anodic compound and cathodic compound.

[c8] 8.The method of Claim 7, wherein said second metal type is another of said anodic compound and cathodic compound.

[c9] 9.The method of Claim 1, wherein said first metal comprises a cathodic compound.

[c10] 10.The method of Claim 9, wherein said second metal comprises an anodic compound.

[c11] 11.The method of Claim 1, wherein said first metal comprises steel.

[c12] 12.The method of Claim 11, wherein said second metal is an anodic compound.

[c13] 13.The method of Claim 11, wherein said second metal

comprises aluminum.

[c14] 14.The method of Claim 1, wherein said first metal and second metal are suitable for forming a galvanic couple.

[c15] 15.A system for reducing galvanic corrosion associated with fastener of a first metal type and an orifice in a second metal type and for receiving said fastener, said system comprising:

a corrosive inhibitor coating at least a portion of the fastener adapted to contact said second metal type; and
an anaerobic composition interposed between said corrosive inhibited portion of said fastener and orifice, and adapted to expand after said corrosive inhibited portion of said fastener is inserted into said orifice.

[c16] 16.The system of Claim 15, wherein said fastener is removable from said orifice responsively to at least one of a specific torque and a heat.

[c17] 17.The system of Claim 15, wherein said anaerobic composition consists essentially of aromatic dimethacrylate ester.

[c18] 18.The system of Claim 15, wherein said anaerobic composition consists essentially of hydroxyalkyl methacrylate.

- [c19] 19.The method of Claim 15, wherein said anaerobic composition consists essentially of bisphenol A fumarate resin.
- [c20] 20.The method of Claim 15, wherein said corrosive inhibitor consists essentially of molybdenum disulfide.
- [c21] 21.The system of Claim 15, wherein said first metal type is anodic and said second metal type is cathodic.
- [c22] 22.The method of Claim 15, wherein said locking device comprises steel.
- [c23] 23.The system of Claim 15, wherein said orifice is formed in a material comprising aluminum.
- [c24] 24.The system of Claim 1, wherein said first and second metal type are suitable for forming a galvanic couple.